PR-2. 5-THIENYL-2-CYCLOALKYLAMINO-1,3,4-THIADIAZINES, HYDROBROMIDES

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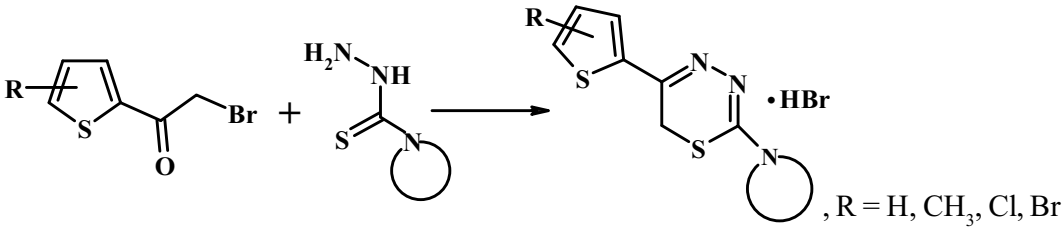
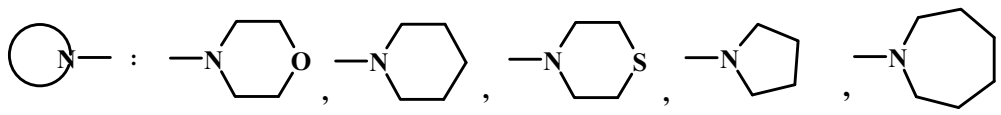
In this work, a large series of structural thiophenic analogs of 5-phenyl-substituted 2-cycloalkylamino-1,3,4-thiadiazines was obtained, for which a wide spectrum of biological activity was previously revealed and their ability to undergo transformation into pyrazole compounds was shown in acidic and alkaline media [1].

In this regard, it was natural to assume that thiadiazines, which contain the aromatic thiophene cycle as a substituent, can also have similar properties and, thus, expect its variable influence on the stability of the 1,3,4-thiadiazine system to such a transformation [2].





All obtained 1,3,4-thiadiazines were synthesized in the form of water-soluble salts, hydrobromides by cyclocondensation of substituted α-bromoacetylthiophenes with various 4,4-cycloalkyl substituted thiosemicarbazides. For all 2-acetylthiophenes used in the synthesis, optimal conditions for bromination were selected, followed by purification of the α-bromoacetylthiophenes obtained by column chromatography.

References

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